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ABSTRACT

This module is part of a set of management and supervisor training (MAST) materials developed by the Department of Energy for the Waste Isolation Division. Its stated purpose is to enable trainees to develop effective plans. The first section of the module is an introduction that includes a terminal objective and opening remarks intended to focus the trainees' attention on the subjects discussed in the module. Most other module sections begin with a list of enabling objectives. Many sections contain "critical incidents" or real-life occurrences at the Department of Energy's Waste Isolation Pilot Plant that relate to the section topic. Some illustrate effective management practices, and some illustrate ineffective ones. Each critical incident includes "lessons learned" information. Section topics include developing plans, setting goals, budgeting resources, scheduling, and monitoring implementation. A list of "smart moves" is included near the end of the module. Contains 18 references and a practice test. Answers and feedback for the test are provided. (YLB)

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ED 395 153

Waste Isolation Division (WID)
Management and Supervisor Training (MAST) Program

PLANNING

MAS-107

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Trainee Name: _____

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A. MODULE INTRODUCTION

Terminal Objective

Upon completion of this module, trainees will be able to develop effective plans.

Mastery of the terminal objective will be demonstrated by scoring 80 percent or higher on the module examination.

Planning is an important tool for managers and supervisors because it:

- helps make the best use of our scarcest resource--time

  How much uninterrupted time do you have on an average workday? One hour? Less than an hour? Your time is scarce. Planning helps you use your time wisely.

- helps us focus on important activities

  Without planning, resources are often directed toward low value activities. Through planning, organizational resources can be directed toward important work.

- enables us to affect our future

  Planning helps organizations and people change the present and influence the future.

- is the basis for organizing

  Plans establish what work needs to get done by when. So plans can help to mold an organization that fits the work it's expected to accomplish.

- is the basis for controlling

  Goals and schedules set during planning can help you control work in progress.

- guides delegation

  Before you can delegate, you have to know what needs to be done. Plans provide this information so you can delegate work effectively.

- can have a positive effect on job performance

  People generally perform best when they have challenging but attainable goals to meet. So plans, if subdivided into work group and employee goals, can motivate highly effective job performance.

- helps minimize confusion

  Plans define what needs to happen by when. This minimizes confusion about priorities and work activities.

- differentiates effective from ineffective managers

  One researcher compared 30 effective managers and 30 ineffective managers. The effective managers scored significantly higher in planning. The ineffective managers spent less time planning and rated organizing and controlling significantly higher in importance than the effective managers.

As you can see, planning is an important management function. In the next section of the module, we'll talk about how to develop plans.

B. DEVELOPING PLANS

Enabling Objectives

Upon completion of this section, the trainee will be able to:

1. Identify good practices for developing plans.
2. Identify practices to avoid when developing plans.
3. Given a scenario, evaluate the manager's effectiveness in developing plans.

Types of Plans

Strategic plans

The time period of **strategic plans** is generally five years or more. They're usually prepared by senior managers.

Long-range plans

The time period of **long-range plans** is generally more than one year but less than five years. Long-range planning occurs at all levels of management.

Short-range plans

The time period of **short-range plans** is generally one year or less. They tend to be specific, telling exactly what needs to be done by when. For example, a plan for completing a self-assessment six months from now would be a short-range plan. Short-range planning occurs at all levels of management.

Action plans

An **action plan** is a plan that guides specific actions by individuals. For example, if you plan to conduct a self-assessment, part of your action plan might be to finish the first draft two weeks from today. This type of planning occurs at all levels of an organization--from the executive to the first-line employee.

The Planning Sequence

Here are steps you can follow to develop a plan from start to finish.

Select goals

The purpose of planning is to help accomplish goals. To identify goals for which you'll need plans, ask yourself:

- What are the division's goals?

  Through planning, you can help the division reach its goals.

- What are my department's goals?

  Incorporate department goals into your planning. By doing so, you support your boss and help make your department effective.

- What are the goals of my section or group?

  Planning will help you meet or surpass the expectations of your boss and the Department of Energy (DOE).

- What are my goals?

  Planning will help you reach your goals.

Visualize the attainment of your goals

By visualizing, we mean picturing your desired end result in your mind. When you reach your goals:

- What will the end result look like?
- What will the effects be?
- What will people say and do as a result?

Having a mental picture of your desired end result makes planning easier.

Compare where you are now with where you want to be

Compare your present situation with your desired end result. What are the differences? Identify things you'll need to change to reach your goals.

Determine your approach

From a big picture perspective, how will you accomplish your goals? What approach do you want to take? What do you want to avoid? Referring to the mental picture you formed earlier can help you determine your approach.

Prepare plans

First, identify tasks that need to be completed to reach your goals. Seek input from others. This will help identify all relevant tasks.

Then identify when each task must be completed. For complex plans, a graphic schedule can help keep things on track. The Program Review and Reporting Section can help you develop schedules.

Here are some topics you may need to include in your plans:

- Goals
- Budget
- Deadlines
- Priorities
- Constraints
- Tasks and subtasks
- Required resources
- Implementation process
- Interfaces with other tasks
- Logic ties between subtasks

Identify needed resources

Before implementing a plan, it's necessary to make realistic estimates of required resources. **Resources** include things like employees, materials, supplies, equipment, time, and people who can help you. You can't expect to carry out your plan successfully without adequate resources. Without timely access to resources, delays will occur. In this case, the delays need to be planned and their impact on other tasks or plans must be assessed.

To identify needed resources, follow this process:

- Look for a project from the past that's similar to your project

  If there was a similar project, find out the resources required to complete it.

- Make a list of all resources required to implement your project

  Seek input from others to make sure you don't miss anything.

- Identify when each resource will be needed and the different ways it can be acquired

  If a resource can't be acquired, look for acceptable substitutes. If equipment you don't already have is required, don't overlook the possibility of borrowing it. For information on borrowing equipment, see MAS-117, *Material Control*.

- Be realistic about your resources

  For instance, if three different tasks need to be accomplished on a computer and only one computer is available, either find additional computers to use or allow extra time to complete that phase of the project.

Figure out how much it will cost

How much will implementing your plan and achieving your goal cost? Your cost analyst can help you develop a realistic budget.

Consider factors that could affect your plans

Before implementing your plans, consider factors that could affect them such as:

- the budget
- DOE priorities
- regulatory requirements
- the knowledge, skills, and abilities of your employees
- plans, priorities, and requirements of interfacing organizations

Identifying and considering the potential effect of these factors will help you make better plans.

Make contingency plans

A **contingency** is an event that may or may not happen. Planning for contingencies helps you either prevent them from occurring or deal with them effectively if they do occur.

Here's how you can plan for contingencies:

- Think like a pessimist

  Try to think of everything that could go wrong. This will help you identify potential problems you need to plan for.

- Categorize potential problems according to the impact they would have (high, medium, and low)

- For high-impact potential problems with a reasonable chance of occurring, identify:

  - preventive actions

    Preventive actions reduce the probability that a potential problem will occur by blocking or eliminating its causes. Ask "What will decrease the probability of the problem occurring?"

  - contingent actions

    Contingent actions minimize the impact of a problem. Ask "What would minimize the impact of this problem?"

  You may also want to identify preventive and contingent actions for medium-impact potential problems that are likely to occur.

Prepare to implement your plan

Before you implement your plan:

- assess its completeness and accuracy

- review it with your boss

- consider using project management techniques such as scheduling to help you implement your plan

Implement your plan and revise as necessary

Few projects proceed exactly as planned. Be responsive to changing conditions and, if necessary, revise your plan to keep it up-to-date.

Good Practices

- Make long-range plans

  Research has shown that supervisors of groups with better production records engaged in long-range planning and anticipated future problems more often. Their peers with less impressive production records focused on day-to-day operations.

  Preparing long-range plans forces you to think about the future. Here are some questions that will help you adopt the mindset you'll need for long-range planning:

  - What will your organization be doing several years from now?
  - What types of knowledge, skills, and abilities will your employees need?
  - What trends does your organization need to respond to?
  - What will the division need from you and your organization several years from now?

  Some supervisory and managerial positions don't require much long-range planning. If you want to improve your long-range planning skills, ask your boss for help. For additional suggestions on how to improve your long-range planning skills, check with the Manager, Organizational Development.

- Adopt the proper mindset for planning

  When making plans, be a pessimist. When implementing plans, be an optimist.

- Whenever possible, involve your employees in planning

  This is a good practice because:

  - they can help you develop better plans
  - it helps get their buy-in to the plans
  - it can be a developmental experience for them

- Identify other organizations affected by, or involved in, your plans

  Involve appropriate persons from these organizations early in the planning process. This will save time and prevent conflicts later on.

- Set aside "quiet time" at least once a week for reviewing and updating your plans

- Incorporate division goals and your boss's goals into your plans

  This helps ensure you and your employees support your boss and the general manager.

- Incorporate the WID vision into your plans

  The WID vision is as follows:

  > WID will set the standard of excellence for the safe, environmentally sound disposal of TRU waste.

  It defines what the division aspires to. Ask yourself, "What can I do to make the WID vision a reality?"

- Gain support for your plans

  It'll be easier to implement your plans if you build support for them. Determine the support you'll need from other organizations. Then figure out how to get the support.

- Seek assignments requiring planning

  This will help you improve your planning skills.

- Learn from skilled planners

  Review their plans. What did they include in their plans?

- Ask your boss to give you feedback when your planning could be more effective

- After you develop plans, ask others to identify potential problems

  Have a peer play devil's advocate and confront you with everything that could possibly go wrong. Then make contingency plans.

- Make individuals, not groups, accountable for plans

  Plans are more likely to be made and carried out when individuals, rather than groups, are accountable.

- Plan for your absences

  When you know you'll be absent, here are some things you can do so the work doesn't stop while you're gone:

  - Communicate your scheduled absences to everyone who needs to know
  - Delegate tasks as necessary to ensure the work flow will continue without interruption or delay
  - Tell your employees about resources and sources of help they can rely on
  - Give your employees a heads-up about issues or questions that may arise

- Share your plans with other organizations who might have an interest in them

  It's better to overcommunicate your plans than it is to undercommunicate them.

- Build people into your plans

  Plans are implemented by people. So when you plan, think about participation, communication and delegation. Participation promotes ownership. Communication helps ensure plans are understood. Delegation gives people a chance to use their creativity in carrying out plans.

- Get buy-in from your manager and those who will be affected by your plans

  Don't make your plans in a vacuum.

Practices to Avoid

- Letting planning become a paper exercise

  Regarding planning as a low-value activity will cause it to be of low value. The main value of plans is the thinking that goes into them. If you put sufficient thought and effort into your plans, they'll help you reach your goals. Use planning as an opportunity to discuss the future, weigh alternatives, and develop useful plans.

- Underestimating the importance of planning

  According to management expert Louis Allen:

  > Managers rarely fall short of their real potential for lack of technical competence. Of all the managerial failures I have seen, there most often appears one real cause: a failure to plan logically and consistently so that the limited resources that are available are directed to the opportunities that really matter.

- Failing to plan because you "don't have time"

  The less time you have to spare, the more important it is to plan. Not planning because you're too busy may save you a couple of hours a week. But this time savings will be more than offset. The lack of planning will cause you to work on low-priority items that could have waited.

- Neglecting long-range plans because of day-to-day "fire fighting"

  Don't let your long-range plans gather dust. Review, update, and implement your long-range plans at least once a year.

- Underestimating resistance to plan implementation

  Many people prefer business as usual. Plan for resistance you're likely to encounter when you implement plans.

CRITICAL INCIDENT
INEFFECTIVE BEHAVIOR

Occurrence: The DOE asked WID to perform a project. The project was assigned to a manager. The manager plunged in without a plan and without getting buy-in from other organizations. Halfway through the project, the manager solicited necessary input from the DOE and other WID organizations. They agreed that the project was headed down the wrong path. The project was assigned to another WID organization.

Impact: Completion of the project was delayed unnecessarily. Unnecessary costs were incurred.

Lesson learned: Failure to plan and to get buy-in for plans can harm the division and cause you problems.

CRITICAL INCIDENT
EFFECTIVE BEHAVIOR

Occurrence: The organization that "picked up the ball" to complete the project mentioned in the previous incident quickly assembled a plan to meet the project deadline. Management and non-management personnel as well as representatives from other WID organizations were involved in the planning. Plan milestones were closely monitored during this high-speed project.

Impacts: 1) The organization completed the project by the deadline. 2) The DOE commended the project and its results.

Lesson learned: Planning is a key to successfully completing projects with tight deadlines.

C. SETTING GOALS

Enabling Objectives

Upon completion of this section, the trainee will be able to:

1. Identify good practices for setting goals.
2. Identify practices to avoid when setting goals.
3. Given a scenario, evaluate the manager's effectiveness in setting goals.

Goals and **objectives** are ends toward which effort is directed. Both terms, "goals" and "objectives," are used at WID. For example, WID departments set Quality Improvement Plan *goals*. WID departments also strive to meet or exceed performance *objectives* set by the DOE.

In the interest of simplicity, we've chosen to use the term "goals" in this section. But the information presented here applies to both goals and objectives.

Goals are important to WID because they:

- guide the efforts of individuals and organizations

  WID is composed of many teams, sections, and departments. It's essential that the general manager keep these organizations moving in a common direction. One way the general manager does this is through goals.

- can motivate us to work efficiently and effectively

  Goals can create a more results-oriented, purposeful organizational climate. Most of us are highly motivated to meet our goals. It provides a sense of accomplishment when goals are achieved.

- are the basis for evaluating performance

  Objectives set through the Performance Management System and the Performance Evaluation Plan are goals. These types of goals are a fairly objective basis from which to evaluate performance. Evaluators can determine if goals were achieved, partially achieved, or not achieved.

- help prevent us from being diverted by things that aren't the best use of our time

  All of us are bombarded with activities and people vying for our attention. Goals help keep us on track by focusing our attention on worthwhile endeavors.

The Criteria of Good Goals

To be useful in planning, goals need to:

- be significant

  Goals should challenge us to perform better. Insignificant or impossible-to-miss goals trivialize the goal-setting process. This makes it more difficult to achieve results in the future because people don't perceive goals as important.

- be reasonable

  Our goals need to take resource limitations and competing priorities into account. Employee perceptions should also be taken into account. Those responsible for meeting a goal should perceive it as reasonable. If not, they won't exert much effort to reach the goal.

- be clear and specific

  The desired outcome of a goal should be understandable. Unclear goals create confusion and conflict.

- be measurable

  Goals should be measurable in quantitative or qualitative terms. If a goal isn't measurable, no one will know whether or not it's been achieved.

- specify a completion date

  Completion dates are important because a goal with no time limit has little or no value.

- be logically consistent with each other

  Inconsistent goals pull the organization in different directions. Goals that are logically consistent with one another help the organization function smoothly.

- be reevaluated frequently

  Priorities at the WIPP often change. Reevaluate goals frequently. Ensure they're still significant and reasonable. Reevaluating goals also helps keep them fresh in our minds.

Good Practices

- Start goal statements with an action verb

  It's standard practice at WID to begin goal statements with action verbs such as "complete," "develop," "conduct," "write," etc. This makes goal statements easy to read and understand.

- Develop objective measures of success that will tell you when you've reached a goal

- Ensure your group's goals and your own are based on department and division goals

  If they aren't, revise your goals so they will support the goals of your department and the division.

- Rank your goals in priority order

  The top priority goals should be those that will have the greatest impact on WID's performance. Focus most of your resources on these top priority goals.

- Identify whose help you'll need to reach your goals

  Whose support--and what type of support--will you need? Talk to these people. Determine the degree to which they are willing and able to help you.

- Communicate your goals

  Communicate your goals to your:

  - boss

    Once your boss knows where you're headed, he or she can provide support.

  - employees

    Employees can also provide support in reaching your goals. This is especially true if they set Performance Management System objectives based on your goals.

- DOE counterpart

  It may be beneficial to communicate some of your goals to your DOE counterpart. Your counterpart needs to know what you and your organization are doing to support the WIPP mission. Your counterpart will be able to help you achieve some of your goals.

- peers

  As the Management Assessment of Organizational Communication revealed, WID supervisors and managers are very willing to provide help if asked.

- Attain goal acceptance and commitment from necessary others

  Achieving many goals requires getting acceptance and commitment from others. You can get this by:

  - involving the people from whom you'll need acceptance and commitment in goal-setting

  - communicating the importance of achieving goals

- Assign responsibility for goals

  The greater an employee's responsibility for attaining a goal, the stronger his or her commitment to the goal.

- Give people feedback as they pursue their goals

  Let people know whether or not their goal-directed actions are on target.

- Use goals to increase productivity

  Productivity can be significantly increased by setting specific goals and giving employees attention and support.

- Review progress toward goals regularly

  Meet with your employees one-on-one and discuss progress, problems, and solutions. These discussions keep your employees on track and show them you're interested in their progress.

- Congratulate employees when they reach goals

  Express your appreciation. This makes goal attainment a rewarding experience for your employees. It also encourages them to continue their goal-directed behavior.

Practices to Avoid

- Allowing goals to generate counterproductive behavior

  Goals may cause people to:

  - behave competitively
  - act as if their goal is more important than anything else

  If you see counterproductive behavior, recalibrate as necessary.

- Criticizing employees for failing to attain goals

  This has a demotivating effect. Instead of criticizing, lower goals to an attainable level after failure. Then gradually raise them until employees are achieving up to their potential.

D. BUDGETING RESOURCES

Enabling Objectives

Upon completion of this section, the trainee will be able to:

1. Identify good practices for budgeting resources.
2. Identify practices to avoid when budgeting resources.
3. Given a scenario, evaluate the manager's effectiveness in budgeting resources.

Resources need to be budgeted and used wisely because they're limited. Problems can result if resources are spread too thin. What causes resources to become spread too thin? One cause is managers who respond to too many requests for help at the same time. When managers do this, the help they give isn't adequate. The people they've agreed to help end up being displeased. So it's necessary to occasionally say "no" to requests for help. Sometimes it's possible to give the help at a later date or refer requesters to someone else who can help.

The Pareto Principle can help you decide where to invest your resources. Vilfredo Pareto, an Italian economist and sociologist, discovered the 20%-80% principle. According to Pareto, 20% of the effort produces 80% of the results. For example, Pareto would contend that 20% of your activities generate 80% of your value to the division. These are called "the critical few."

The Pareto Principle isn't always applicable. And the figures 20% and 80% aren't intended to be precise. Nevertheless, the Pareto Principle is a rule of thumb you can use. Make a list of work activities that soak up your resources. Put a "C" for "critical few" next to activities that are of high value to the division. Try to limit the number of activities labeled "C" to no more than 20% of the total. Put an "R" for "routine many" next to the rest of the activities.

Now look at your list. Are you allocating most of your resources to the critical few activities? If not, take action to correct the imbalance.

Rules of Thumb for Allocating Resources

Have you ever used a rule of thumb? Rules of thumb can be used to allocate resources according to priority rules. Some of the more common priority rules are:

- Shortest task first

  Tasks are ordered in terms of their duration, with the shortest first. In general, this rule will maximize the number of tasks completed by a system during some time period.

- Most resources first

  Tasks are ordered by use of a specific resource, with the largest user heading the list. The assumption behind this rule is that more important tasks usually place a higher demand on scarce resources.

- Minimum slack first

  Slack is the difference between the latest possible starting time and earliest starting time for a task. Under the minimum slack first rule, tasks are ordered by the amount of slack, least slack going first.

- First come, first served

  Tasks are processed in the order that they arrive.

Research has shown that the minimum slack rule is the best or near-best quite often and rarely causes poor performance. It usually results in the minimum amount of schedule slippage, the best utilization of facilities, and the minimum total time requirement.

Good Practices

- Allocate resources to the highest value projects

  There are never enough resources for every potential project, so it's important to allocate resources according to priorities. Thinking about the impact and urgency of projects can help you make good resource allocation decisions. Ask yourself:

  - "What will the impact of this project be?"
  - "What's the urgency of this project?"

High impact, urgent projects should be top priority.

- Use the Pareto Principle

  Identify the critical few activities and concentrate the largest share of your resources on them. This will help you get greater returns from your resources.

- When new activities present themselves, ask yourself, "Will this help my organization meet its goals?"

  If the answer is "no," consider not doing or delegating the activities.

Practices to Avoid

- Indiscriminantly using the shortest task first priority rule

  Sometimes it's important to start on the most urgent or least slack tasks first.

- Indiscriminantly using a first come, first served approach for completing tasks

  The impact and urgency of tasks should be considered.

- Committing someone else's resources

  This is a violation of responsibility and authority protocol. It also tends to damage working relationships because people resent it when someone else makes commitments for them.

E. SCHEDULING

Enabling Objectives

Upon completion of this section, the trainee will be able to:

1. Identify good scheduling practices.
2. Identify scheduling practices to avoid.
3. Given a scenario, evaluate the manager's effectiveness in scheduling.

A **schedule** is a plan indicating the time and sequence of each activity to meet a goal or complete a project. Schedules are used to track progress, control, and manage programs and projects. They range from high level, such as the WIPP Disposal Decision Plan, to detailed, such as the Plan of the Week Schedule. Other examples of schedules used at the WIPP include Work Authorization Directive schedules, the Integrated Site Readiness Schedule, and the DOE Monitored Milestone Schedule.

Integrated program schedules are used at the WIPP to show logic ties and interfaces between WIPP organizations. They contain "big ticket" activities that are critical to the WIPP. Preparing integrated program schedules helps identify potential conflicts between activities so corrective action can be taken.

Schedule Development

It's important to use a graded approach in developing schedules. Determine the level of detail necessary to meet your goal or manage your project. A highly visible goal or project on the critical path usually needs a more detailed schedule than a level-of-effort activity.

Milestones are identified during the planning process. These milestones are then used to develop schedules through a top-down, bottom-up process. Milestones and key activities defined in higher level schedules are used to develop progressively lower level schedules. Any necessary adjustments or corrections identified while developing the lower level schedules are reconciled to support progressively higher level schedules.

Good Scheduling Practices

- When scheduling, lay out your activities in a logical and sequential order

  Identify the order in which activities need to be completed. To do this well, you'll need to thoroughly understand the process or activity you're scheduling.

- Identify constraints affecting your program (and your schedule)

  For example, you may be constrained by required reviews and approvals. Or you may be constrained while you wait for products or services supplied by another organization. Constraints need to be built into your schedule.

- Use schedules as a budgeting tool

  If one of your programs requires more resources, a schedule can help others understand the need. They can see for themselves the amount of progress made and what's left to be done.

- Use an appropriate amount of detail on schedules

  Small programs of moderate importance usually don't need a detailed schedule. Start and completion milestones with summary bar activity schedules will probably suffice. Important programs may need a much more detailed schedule. Guidance on the appropriate level of detail is available from the Program Review and Reporting Section.

- Communicate with schedulers to get what you want

  The schedulers in the Program Review and Reporting Section will provide you with the type of schedule you need if they know what you need. If what they're providing you isn't useful, tell them.

- Keep schedules up-to-date

  Otherwise, they're not useful.

Scheduling Practices to Avoid

- Imposing artificial schedules

  An "artificial schedule" is one that isn't realistic. Artificial schedules come about when someone sets a deadline without investigating whether the deadline is reasonable. Artificial schedules:

  - cause inefficient resource use
  - undermine the morale of persons implementing the schedules

- Padding schedules

  "Padding" is building a significant amount of nonessential time into a schedule. Padding causes projects to be too long and expensive. And this causes programs to be "axed."

- Using schedules as reasons to "beat people up" or engage in finger pointing

  The attitude that works best for the division is "What can we do to get back on schedule?" rather than "Joe is late."

- Assuming that reporting a schedule variance will put you in the "boiling pot"

  Reporting programs that are behind schedule makes it possible for others to help you manage the situation proactively.

- Reporting your schedule status the way you want it to be rather than the way it is

  Report your schedule status the way it is. Inaccurate schedule status reports undermine the credibility and usefulness of WID schedules.

CRITICAL INCIDENTS
EFFECTIVE BEHAVIOR

Occurrence: An integrated schedule was developed for a large-scale WIPP program. Progress was tracked and compared to the schedule weekly. Interfaces were identified up front, allowing departments to plan work to support the program.

Impacts: 1) Constraints were identified and resolved before they impacted the program. 2) When delays arose, the schedule made it possible to quickly assess the impacts and respond appropriately. 3) The schedule helped WID promptly answer customer inquiries about the status of the program. 4) The schedule helped focus management attention on the requirements of the program. 5) The program, which was a critical WIPP milestone, was completed on time.

Lessons learned: 1) Well-planned programs can be effectively managed. 2) Schedules can be excellent communication and control tools.

Occurrence: At the outset of a program, a manager asked the Program Review and Reporting Section for scheduling help. A scheduler was assigned to work on the program. A schedule was developed at an appropriate level of detail. The scheduler attended program meetings to collect status information. This information was then used to keep the schedule up-to-date.

Impacts: 1) The schedule helped the manager stay abreast of the status of his program. 2) When unplanned events happened, the manager was able to immediately assess their impact on the program. 3) The schedule was useful in answering "what if" questions relating to the program. 4) When additional funds were needed for the program, the schedule helped justify the budget request.

Lesson learned: Schedules are a good management tool.

F. MONITORING IMPLEMENTATION

Enabling Objectives

Upon completion of this section, the trainee will be able to:

1. Identify good practices for monitoring implementation.
2. Identify practices to avoid when monitoring implementation.
3. Given a scenario, evaluate the manager's effectiveness in monitoring implementation.

Once plans are made, implementation begins. Implementation needs to be monitored to:

- ensure the plan is followed
- deal with unexpected occurrences affecting the plan
- be aware if and when the original plan needs to be modified

Monitoring implementation is a control activity. Good practices for controlling are covered in MAS-109, *Controlling*. Here, we'll cover a few additional practices that will help you monitor implementation.

Decide What to Monitor

Once the implementation of your plan has begun, what do you need to monitor? Performance, cost, and time are almost always relevant factors to monitor. But there may also be other relevant factors such as:

- the number of labor hours used
- the level of customer satisfaction
- the number or extent of engineering changes

Review your plans to identify factors that need to be monitored.

Decide How to Collect Data

After deciding what to monitor, you need to decide how to collect data on the things you'll be monitoring. Here are some of the ways you can do this:

- Frequency counts

  A **frequency count** is a tally of the occurrences of an event. This type of measure is often used for complaints, days without an accident, number of times a report is late, and similar items.

- Raw numbers

  Dates, dollars, hours, amounts of resources used, and specifications are usually reported in this way. These numbers are often compared with an expected or standard number. Also, variances are commonly reported as the ratios of actual to standard.

- Subjective numeric ratings

  These are subjective estimates made by knowledgeable persons. The eye of an experienced employee can be an accurate subjective measure.

- Indicators

  When it's not possible to measure performance directly, it may be possible to find an indirect measure or indicator. For example, the amount of time required to process work packages may be a good indicator of team efficiency.

- Verbal measures

  Measures for things like quality of team member cooperation, morale of team members, or quality of interfaces with the customer frequently take the form of verbal characterizations. For instance, morale could be characterized as "high," "mediocre," or "low."

Ideally, a monitoring system should provide data that will help you prevent problems. For example, an unfavorable trend in data can alert you to a potential problem. Then you can take proactive action to keep the implementation of your plan on track.

Good Practices

- Establish useful information channels

  For example, a weekly progress meeting can help you monitor how a project is progressing.

- Pay special attention to the critical activities in your plan

  Which activities present the greatest risk to the success of your plan? Failing to monitor these activities can be the ruination of your plan. To help identify what's critical, look for activities that:

  - have tight deadlines
  - seem most likely to fail
  - are complex and difficult
  - require something new and unfamiliar
  - have gaps or overlaps in responsibility
  - have great impact on cost or several other steps

- Increase accountability through documentation

  This is especially useful for multi-organization projects. Keep an active list of open items. **Open items** are tasks or issues that are unresolved or incomplete. The list should include a statement describing the item, the lead (the person responsible for the item), and the commitment date. This greatly increases the odds that the commitment date will be met.

- Don't settle for ambiguous communication

  If someone gives you ambiguous information about the status of plan implementation, seek clarification.

- Monitor by walking around

  Spend time face-to-face with the people who are implementing your plans.

- Learn how to use your calendar or a tickler file as a monitoring tool

  Schedule appropriate times to follow up on various project activities. A calendar or tickler file can remind you when it's time.

- Adjust your plans when necessary

  If conditions change, your plans may need to, also.

- Focus monitoring activities on data that's important and valuable

  It's important to dig for the data you need to effectively monitor the implementation of your plans.

Practices to Avoid

- Assuming that, just because you haven't heard otherwise, plan implementation is going smoothly

  This can get you "burned." Get up from your desk and find out how things are going.

- Punishing bearers of bad news

  For your monitoring system to work well, you need to hear both good and bad news. So don't "kill the messenger" who brings bad news.

CRITICAL INCIDENT
INEFFECTIVE BEHAVIOR

Occurrence: A manager made a plan and announced it with much hoopla. By doing so, the manager raised expectations. After the plan was accepted, the manager lost interest in it. Because the manager didn't monitor the implementation of his plan, it was never completed. An audit team later discovered this.

Impact: The audit team raked the manager and his department over the coals.

Lesson learned: Neglecting to monitor the implementation of plans can have nasty consequences.

G. SMART MOVES--WHAT YOU CAN DO NOW

Here are some things you can do now to make your section/department more effective:

- Set aside "quiet time" at least once a week for reviewing and updating your plans (*Page 11*)
- After you develop plans, ask others to identify potential problems (*Page 11*)
- Identify whose help you'll need to reach your goals (*Page 17*)
- Use goals to increase productivity (*Page 18*)
- Review progress toward goals regularly (*Page 18*)
- Congratulate employees when they reach goals (*Page 18*)
- Allocate resources to the highest value projects (*Page 21*)
- Use schedules as a budgeting tool (*Page 24*)
- Pay special attention to the critical activities in your plans (*Page 29*)
- Monitor by walking around (*Page 29*)

H. MODULE REFERENCES

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I. PRACTICE TEST

1. A manager said, "When planning for contingencies, it's important to think like an optimist." Was the manager correct? Why?

   a. YES--it helps you identify everything that could go wrong

   b. YES--managers should think optimistically during all phases of the planning process

   c. NO--it's best to think like a pessimist when planning for contingencies

   (B.3)

2. A manager didn't talk to his peers in other WID organizations about his plans until the plans were finalized. Was that a good practice? Why?

   a. YES--research has shown that it's best for managers to complete their plans before they share information about them with others

   b. YES--involving persons from other organizations during the planning process is a waste of time that leads to conflicts later on

   c. NO--by talking to his peers, the manager could have found out about potential problems and gained support for his plans

   (B.1)

3. A manager set Quality Improvement Plan goals that were impossible to miss. Was this a good practice? Why?

   a. YES--impossible to miss goals maximize motivation

   b. YES--impossible to miss goals cause people to perceive goal-setting as an important activity

   c. NO--goals should be set so high that employees will think they can't be attained

   d. NO--impossible to miss goals trivialize the goal-setting process

   (C.3)

4. A manager said, "Productivity can be significantly increased by setting specific goals and giving employees attention and support." Was the manager correct? Why?

   a. YES--setting and using goals is a good way to increase productivity

   b. YES--setting goals is all that's required to increase productivity

   c. NO--setting and using goals usually leads to counterproductive behavior

   d. NO--goal-setting usually leads to decreased performance because employees feel overwhelmed

   (C.3)

5. Which of the following is the best way to identify potential conflicts between activities so corrective action can be taken?

   a. Preparing integrated program schedules

   b. Using the graded approach in developing schedules

   c. Imposing artificial schedules

   d. Padding schedules

   e. Using subjective numeric ratings

   (E.1)

6. A manager said, "When it's not possible to measure performance directly, it may be possible to find an indirect measure or indicator." Was the manager correct? Why?

   a. YES--indirect measures or indicators are the preferred method of collecting data and monitoring implementation at WID

   b. YES--indirect measures or indicators can be an acceptable substitute for direct performance measures

   c. NO--when it's not possible to measure performance directly, data collection must be abandoned

   d. NO--conduct of operations principles prohibit the use of indirect measures or indicators

   (F.3)

7. A manager set up an intricate system of performance indicators to monitor the implementation of her plans. The manager had confidence in her system, so she rarely left her office to monitor implementation of her plans. Was that a good practice? Why?

   a. YES--managers should strive to set up intricate systems like this that will allow them to monitor from a distance

   b. YES--managers should set up intricate systems like this so they won't have to leave their offices

   c. NO--the manager should have spent more time face-to-face with the people who implemented her plans

   d. NO--the manager should have delegated her monitoring activities to an exempt employee who would serve as her eyes and ears

   (F.3)

8. A manager saw a peer making long-range plans. The manager said, "What are you wasting your time for? Long-range planning is the exclusive territory of senior managers." Was the manager correct? Why?

   a. YES--the peer was committing a blunder; only senior managers should make long-range plans

   b. YES--only senior managers have the organizational savvy needed to make good long-range plans

   c. NO--the manager's second statement was incorrect; the manager should have said, "All planning is the exclusive territory of senior managers."

   d. NO--long-range planning is a good practice that occurs at all levels of management

   (B.3)

9. Preventive actions

   a. minimize the impact of a problem.

   b. reduce the probability that a problem will occur.

   c. eliminate the possibility that a problem will occur.

   d. are designed to maximize the benefits of positive occurrences.

   (B.1)

10. A manager advised, "Make an individual, rather than a group, accountable for your plan." Was the manager giving good advice? Why?

a. YES--making an individual accountable provides a scapegoat if the plan isn't implemented effectively

b. YES--plans are more likely to be made and carried out when individuals, rather than groups, are accountable

c. NO--the manager should have advised, "Make a group, rather than an individual, accountable for your plan."

d. NO--making individuals accountable is an outdated management practice that has fallen into disfavor at WID

(B.3)

J. ANSWERS AND FEEDBACK FOR THE PRACTICE TEST

1. c. NO--it's best to think like a pessimist when planning for contingencies

2. c. NO--by talking to his peers, the manager could have found out about potential problems and gained support for his plans

3. d. NO--impossible-to-miss goals trivialize the goal-setting process

4. a. YES--setting and using goals is a good way to increase productivity

5. a. Preparing integrated program schedules

6. b. YES--indirect measures or indicators can be an acceptable substitute for direct performance measures

7. c. NO--the manager should have spent more time face-to-face with the people who implemented her plans

8. d. NO--long-range planning is a good practice that occurs at all levels of management

9. b. reduce the probability that a problem will occur.

10. b. YES--plans are more likely to be made and carried out when individuals, rather than groups, are accountable

If you scored 80 percent or higher on the practice test, you're ready to take the module examination; please proceed to Organizational Development.

If you scored less than 80 percent on the practice test, please re-read the module and take the practice test again. If you still have questions, contact the Team Leader, Professional Development, or the Manager, Organizational Development.